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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.       | CONFIRMATION NO.       |
|---|-------------|----------------------|---------------------------|------------------------|
| 10/626,723  | 07/25/2003  | Masaki Nakano        | 03500.016907              | 2367                   |
| 5514 7590 05/22/2007<br>FITZPATRICK CELLA HARPER & SCINTO<br>30 ROCKEFELLER PLAZA<br>NEW YORK, NY 10112 |             |                      | EXAMINER<br>WOODS, ERIC V |                        |
|   |             |                      | ART UNIT<br>2628          | PAPER NUMBER           |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/626,723

Applicant(s)

NAKANO ET AL.

Examiner

Eric Woods

Art Unit

2628

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,5,7-10 and 12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,7-10 and 12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/6/07 has been entered.

### ***Response to Arguments***

Applicant's arguments, see Remarks pages 7-11 and claim amendments, filed 1/8/2007, with respect to the rejection(s) of claim(s) 1-2, 4-5, 7-10, and 12 under 35 USC 103(a) have been fully considered and are persuasive.

Therefore, the rejection of claims 1, 2, 4, 5, 7-10, and 12 under 35 USC 103(a) has been withdrawn in view of applicant's amendments to the claims.

However, upon further consideration, a new ground(s) of rejection is made in view of various references as set forth below.

Since applicant's arguments are rejected to the amended claims and the current grounds of rejection have been withdrawn, the remainder of applicant's arguments are thusly moot in view of the new grounds of rejection.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The recitation "the display means" lacks antecedent basis in the claims.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-2 and 9-10 are rejected under 35 U.S.C. 102(e) as unpatentable over Hamilton et al (US PGPub 2001/0035874 A1) in view of Toffolo et al (US 6,628,247).

Hamilton teaches:

As to claims 1 and 9, (apparatus and method)

An image processing apparatus, comprising:

-Input means for inputting first image data and icon image data; (Hamilton [0009] first image data and icon image data (textural information and other information))

-Determining means for determining a display position of the icon image; and (Hamilton Figures 2-5, [0020-0023])

-Display control means for superimposing one of the first image and the icon image on the other and displaying the first and icon images on a monitor such that the icon image is positioned in the display position determined by the determining means, (Hamilton [0019,0026-0028], Figures 2-5)

-Wherein the determining means determines successively a plurality of display positions different from each other as display positions of the icon image according to a predetermined shift pattern based on an accumulated display time at each shift pattern [0029](regular and irregular shifting at random times within a given range), and wherein the plurality of display positions are within a range [0027] from a predetermined position. (Hamilton [0026-0030], Figures 2-5, claims 2-7, Abstract)

Hamilton expressly teaches moving pixels within a range of one to five pixels in the Abstract: "may be moved by as little as one pixel to as much as several character positions" – and claims 2-4, range as one pixel or a relatively small random number of pixels, therefore, it is within the range specified by applicant) from the predetermined position.

Hamilton doesn't expressly teach the limitation of the accumulated display time at each shift pattern, but Toffolo teaches this limitation. Examiner turns to a source and 1) the nature of the problem to be solved (MPEP 2143.01 (I)) - specifically, the fact that screen burn-in occurs in pixels that are activated more than others – that is, they "age" sooner than others (Toffolo 1:10-15). That being said, logically, the use of screen

Art Unit: 2628

savers is typical – such that moving or changing images appear that more evenly age the pixels (Toffolo 1:15-23), where such images move around to more evenly illuminate pixels. Therefore, one of ordinary skill in the art at the time the invention was made would understand that illuminating all pixels in equal amounts would uniformly age them and prevent screen burning. As such, given the nature of the problem to be solved (equal illumination of all pixels), it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hamilton to shift the second image, e.g. the textual information, around the screen in a manner that uniformly illuminates each pixel within the permitted areas (e.g. [0028] and Toffolo 1:24-35). This can only occur if the system stores the accumulated display time at each pixel so that the system can shift the image to the pixels that have lower illumination values. Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to modify Hamilton to store the amount of time each pixel had been illuminated and shift the icon image / textual information in a manner that ensured that each pixel was equally illuminated.

As to claims 2 and 10, Hamilton must inherently have an instruction unit that provides the determining unit with the information for the display position of the icon.

As to claims 4 and 12, Hamilton must store the time at a current storage position in order to know when to shift the pattern at fixed intervals. However, Hamilton fails to teach storing the accumulated time at various display positions such that the icon image is shifted to position having minimum time, but as explained above, with respect to

Toffolo and the nature of the problem to be solved, the modified system of Hamilton would shift the icon image (textual information) to the area having the lowest amount or percent of display time in order to more evenly age all pixels, which would be the one having minimum display or illumination time (Toffolo 1:45-50).

Claim 5 is rejected under 35 USC 103(a) as unpatentable over Hamilton / Toffolo in view of Abe (JP 07-199889).

Hamilton / Toffolo fails to expressly teach 'object image.' As such, the Abe reference clearly can generate arbitrary images or animations, for example the fish cited in [0008] and shown in Drawings 3 and 7, see elements 42 and 61 in Drawing 3 specifically. Obviously, in either or both cases, there is an "image generation means" that generates and displays the fish animation, such that it moves around the screen and is so moved by the determining means. Obviously, such windows are superimposed as in Drawings 3 and 7 of Abe where one window moves around inside of another. In any case, it would have been obvious to one of ordinary skill in the art at the time the invention was made to enable 'object image' because system of Abe would be ideal for situations where only part of the video was moving, e.g. two persons sitting at dinner table and the window could be randomly positioned in one of many areas of low activity around the edge of the screen to minimize blockage of important main screen video as taught by Hamilton / Toffolo above, and so items other than text could be displayed on picture.

Claim 7 is rejected under 35 USC 103(a) as unpatentable over Hamilton / Toffolo in view of Dimitrova (US 6,697,123 B2).

As to claim 7, Hamilton / Toffolo fails to clearly teach resizing of icon image size. The system of Dimitrova is known to resize the PIP window (see Fig. 4, steps 116 and 130) and it is known to let the user resize it as well (1:5-35). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hamilton / Toffolo to resize the icon image in order to prevent the PIP window from being positioned in the area containing the important objects in the video so that it does not obscure important information (e.g. better constrained to the margin areas of Hamilton [0027] – see Dimitrova [0022] and Figure 4, particularly steps 112-116).

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hamilton / Toffolo in view of Dimitrova as applied to claim 7 above, and further in view of Ward (US PGPub 20002/0073424 A1).

The Hamilton/Toffolo and Dimitrova references do not expressly teach this limitation. The Ward reference specifically (see Fig. 1) teaches the use of icons, menus, and other such items in various windows in [0030, 0171-0173], where other embodiments within Ward have user-adjustable window position, size, and content, see [0028-0029] and particularly [0168], where it is taught that the user can manipulate the various windows, the PIP window and the main window, as far as size and position, and that it can show multiple video streams simultaneously. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify



Hamilton / Toffolo / Dimitrova by Ward to allow the user to expand or reduce the first image as well as the icon image according to preference.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Toffolo et al (US 6,628,247) teaches (2:10-65, Figures 1-3) moving pixels within a given range.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Woods whose telephone number is 571-272-7775. The examiner can normally be reached on M-F 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ulka Chauhan can be reached on 571-272-7782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/626,723  
Art Unit: 2628

Page 9

Eric Woods

May 14, 2007

  
ULKA J. CHAUHAN  
PRIMARY EXAMINER